

Title (en)
Improved startup methods and apparatuses for use in streaming content

Title (de)
Verbesserte Startmethoden und Vorrichtungen zur Verwendung bei Streaming von Dateninhalt

Title (fr)
Procédés et appareils pour un démarrage amélioré lors de la transmission en continu de données

Publication
EP 1271953 A3 20050420 (EN)

Application
EP 02011057 A 20020517

Priority
US 89587201 A 20010628

Abstract (en)
[origin: EP1271953A2] Methods and apparatuses are provided for use with a client and server device connected through a communication link. The client device sends a startup request to the server device. The startup request identifies a streamable media content that is to be provided to the client device, a communication link bandwidth associated with the communication link, and an amount of the desired streamable media content that is to be provided at a bitrate greater than the encoded bitrate but no greater than about the communication link bandwidth. The server device buffers at least the amount of the streamable media content, and transmits the amount of the buffered streamable media content at the higher bitrate. The server device locates a discrete rendering point in the amount of the buffered streamable media content and initiates transmission beginning with the discrete rendering point. After transmitting the amount of the buffered streamable media content, the server device transmits subsequent portions of the streamable media content to the client device at a bitrate about equal to the encoded bitrate. The client device buffers received streamable media content, and subsequently renders the buffered streamed media content. <IMAGE>

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H04N 7/24

IPC 8 full level
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Citation (search report)

- [X] US 5963202 A 19991005 - POLISH NATHANIEL [US]
- [X] KAMIYAMA N ET AL: "Renegotiated CBR transmission in interactive video-on-demand system", MULTIMEDIA COMPUTING AND SYSTEMS '97. PROCEEDINGS., IEEE INTERNATIONAL CONFERENCE ON OTTAWA, ONT., CANADA 3-6 JUNE 1997, LOS ALAMITOS, CA, USA,IEEE COMPUT. SOC, US, 3 June 1997 (1997-06-03), pages 12 - 19, XP010239167, ISBN: 0-8186-7819-4
- [X] PETIT G H ET AL: "Bandwidth resource optimization in video-on-demand network architectures", COMMUNITY NETWORKING INTEGRATED MULTIMEDIA SERVICES TO THE HOME, 1994., PROCEEDINGS OF THE 1ST INTERNATIONAL WORKSHOP ON SAN FRANCISCO, CA, USA 13-14 JULY 1994, NEW YORK, NY, USA,IEEE, 13 July 1994 (1994-07-13), pages 91 - 97, XP010124402, ISBN: 0-7803-2076-X
- [X] LIXIN GAO ET AL: "Supplying instantaneous video-on-demand services using controlled multicast", MULTIMEDIA COMPUTING AND SYSTEMS, 1999. IEEE INTERNATIONAL CONFERENCE ON FLORENCE, ITALY 7-11 JUNE 1999, LOS ALAMITOS, CA, USA,IEEE COMPUT. SOC, US, vol. 2, 7 June 1999 (1999-06-07), pages 117 - 121, XP010519367, ISBN: 0-7695-0253-9
- [A] DUTTA A ET AL: "A streaming architecture for next generation internet", ICC 2001. 2001 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS. CONFERENCE RECORD. HELSINKY, FINLAND, JUNE 11 - 14, 2001, IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS, NEW YORK, NY : IEEE, US, vol. VOL. 1 OF 10, 11 June 2001 (2001-06-11), pages 1303 - 1309, XP010553537, ISBN: 0-7803-7097-1

Cited by
CN105900446A; EP1439666A1; EP1730899A1; EP2123043A4; FR2905221A1; EP1737167A1; EP1581005A1; CN100359949C; EP2538629A1; US9225758B2; US7937531B2; WO2010114685A1; US7746899B2; US7940644B2; US8031701B2; US10820024B2; US11284135B2; US7619972B2; US8683535B2; US9402098B2; US11758241B2; WO2005025223A1; WO2012175448A1; WO2020166759A1

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